

Action Arts and Science Program

Lesson: Animal Adaptations - I Wish I had Duck Feet

Objectives:

Young scientists will observe that all organisms have special adaptations that help them survive in their habitat. For example, ducks use webbed feet to get around and find food, shelter and mates. Through the process of natural selection organisms with better adaptations have an advantage in surviving, reproducing and passing traits to offspring. Young scientists will design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow and meet their needs.

SD Standards/Common Core:

1-LS1-1 Design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow and meet their needs.

LS1.A Structure and Function: All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water and air. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow (1-LS1-1)

Safety:

- Demonstrate how to use sharp utensils, especially sharp pencils for poking holes
- Dangerous animal adaptations (e.g. fake claws that are actually sharp) will be taken away, and the scientist will have to start over

Supplies:

- Picture book: I Wish That I Had Duck Feet by Dr. Seuss
- Card board
- Yarn
- Paper punches
- Masking tape
- Popsicle sticks
- Foam sheets/scraps
- Felt sheets/scraps
- Washable markers, oil pastels (instructor choice)
- Very sharp pencils/ colored pencils
- Feathers
- Duct tape
- Pipe cleaners

References:

Lesson developed for AASP by Carl Fellbaum, March 2018.

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Lesson

Young scientists will observe that all organisms have special adaptations that help them survive in their habitat. For example, ducks use webbed feet to get around and find food, shelter and mates. Through the process of natural selection organisms with better adaptations have an advantage in surviving, reproducing and passing traits to offspring.

Read the book, "I Wish That I had Duck Feet" occasionally stopping to prompt:

- What is an animal adaptation?
- Why does the narrator what duck feet?
- How does a whale spout help it survive and reproduce? What do we call this (natural selection)?
- If you could have one wish from the story, which would you choose? Why?

Now it's your turn as a young scientist! Use household items to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow and meet their needs. This might be larger ears or something else to enhance one of the 5 senses. Maybe camouflage or armor (any creations that are actually sharp or dangerous will be taken away and the scientist will have to start over).

Encourage scientist to try and incorporate 5 different supplies into their piece.

To add feathers, carefully use a sharp pencil to poke holes in the foam at an angle. To secure feathers that lie flat, flip the foam over cover the feather shaft with duct tape.



